Pavia 1878: Volta Celebrations and Honorary Degrees – The Exhibition at the University of Pavia's Historical Archive

Virginio Cantoni and Mauro Mosconi

Faculty of Engineering
University of Pavia
Via A. Ferrata, 1, 27100 Pavia, Italy
Tel: +39 0382 985358; Fax: +39 0382 985373
E-mail: virginio.cantoni@unipv.it; cc:mauro.mosconi@unipv.it

A solemn centenary celebration of Alessandro Volta's university chair was held at the University of Pavia in April 1878. To celebrate this important event, Pavia organized a sumptuous ceremony, with vast echoes both in Italy and abroad. To immortalize the great scientist, a statue was inaugurated in the University courtyard by the Prime Minister, Benedetto Cairoli (a hero of Italian unification), with the backing of Francesco De Sanctis, Minister for National Education.

On that occasion, honorary degrees in Physics were conferred by the University of Pavia on Europe's leading experts in electro-technology, with a choice that – ten years before Heinrich Rudolf Hertz's experiment – wisely balanced German action at distance with English contact action. They really were the leading experts. In the former case, they ranged from Wilhelm Eduard Weber to Ludwig Ferdinand von Helmholtz. In the latter case, they ranged from William Thomson, Lord Kelvin, to James Clerk Maxwell (Faraday had died in 1867). The long correspondence (now fully recuperated in the University of Pavia's Historical Archive) between these outstanding scientists and professors at the University of Pavia certainly stirs the emotions.

The celebrations continued with an unusually high standard until April 29, with lectures on physics that featured not only subjects relating to Volta's inventions and instruments, but also included, among the invited guests, applied experts and technicians of great prestige who had devised new advanced applications for electricity.

On November 18, 2011, an exhibition of the original documents and accompanying materials was opened at the University of Pavia's Historical Archive, with lectures and cultural events that placed them in their historical context. A short list of pictures and photos (Figures 1-12) are here displayed to briefly introduce and illustrate the documents' contents and the theme of the exhibition.

Figure 1. A general view of the exhibition hall before the opening.

Figure 2. A picture of people visiting the exhibition.

Figure 3. The left side of the exhibition hall, showing the original documents and accompanying materials: (l-r) the invention prototypes, the glass showcases containing the original correspondence, and, above, the pictures illustrating the contents of the showcases.

Figure 5. "Alessandro Volta shows the pile to Napoleon" in a picture dated 1897, by Giuseppe Bertini from the Volta Temple in Como, Italy. On the top left is the prestigious Copley Medal awarded to Volta by the Royal Society in 1794, five years before the invention of the pile, for his paper on the capacitor and electricity excited by contact of dissimilar metals. In the middle on the left is the gold medal awarded by the Institut de France on December 2, 1801, when the Institut National des Sciences et des Arts nominated Volta Associé étranger in a plenary session. On the left at the bottom right is the cross of the Ordre National de la Légion d'honneur, awarded to Volta by Napoleon in 1805. On the bottom left is the medal of the Imperial Order of the Iron Crown, awarded to Volta by Emperor Franz I of Austria.

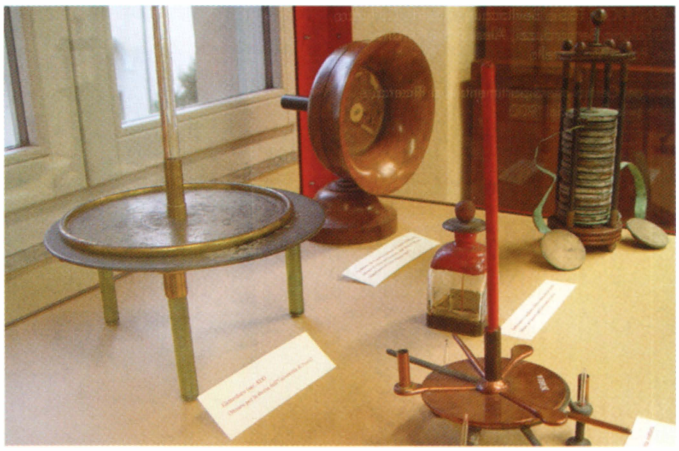

Figure 4. Some of the inventions described at the Lectures on Physics of April 29, 1878. Volta's most important and innovative inventions: the apparatus for studying the origins of Volta's electricity, the "electromotion between heterogeneous metals" (bottom right); the electric condenser (left); the straw electrometer (center); and the pile (top right). At the top center is the Augusto Righi telephone that allowed hearing at a distance of five meters.

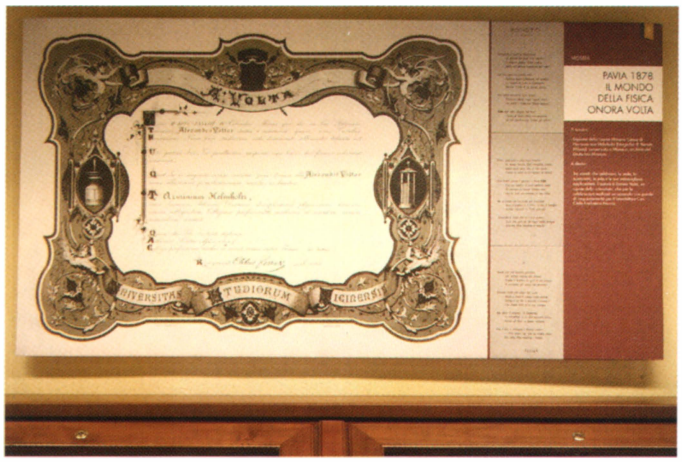

Figure 6. A picture of the honorary degree diploma awarded to Herman Von Helmholtz. In the middle are three sonnets celebrating the university, the scientist, the pile, and its marvelous applications, from the booklet produced for the celebrations by Zanino Volta, one of Volta's grandsons. On the right are captions for the items displayed.

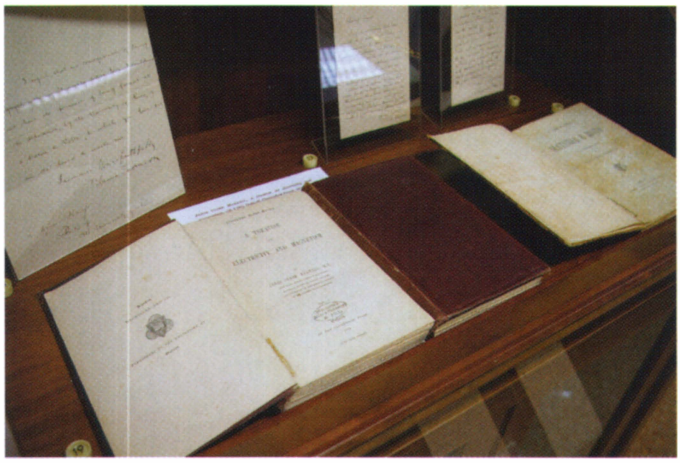

Figure 7. The contents of a glass showcase: the never-exhibited original letters of Lord Kelvin (dated April 29, 1878) and of Maxwell (dated April 23 and June 5, 1878). At the bottom left is the original copy kept in the University Library of Pavia of "A Treatise on Electricity and Magnetism" by Maxwell, published in 1873. On the right is the original copy of "Materia e Moto," translated by Giovanni Cantoni, Dean of the Faculty during the celebrations, from Maxwell's "Motion and Matter," published in Milan in 1881.

Figure 8. More than 50 universities, academies, and scientific societies sent their delegates; others (more than 40) sent letters or telegrams of congratulations. In this glass showcase is a set of letters with messages of thanks and congratulations on receiving a commemorative volume and/or medal of the celebrations from Italy and abroad (Göttingen, Edinburgh, Dresden, Wien, Basel, Tubingen, Copenhagen, and so on).

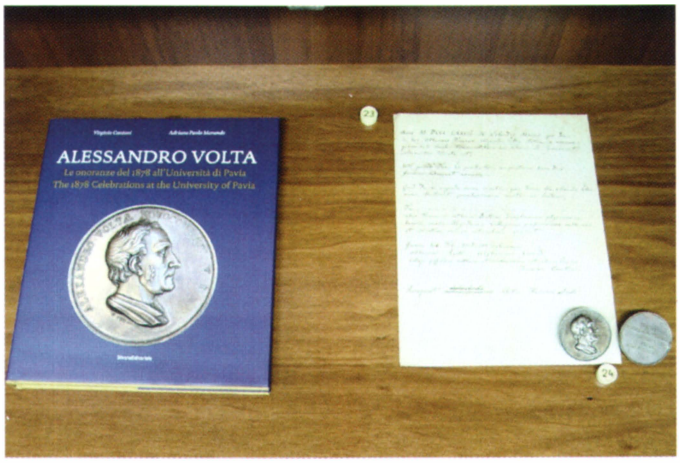

Figure 9. On the left is the book *Alessandro Volta. The 1878 Celebrations at the University of Pavia* (English and Italian) by Virginio Cantoni and Adriano Paolo Morando, just published for the opening of the exhibition. On the right is the Latin text drawn up for the diploma given to the scientists awarded the honoris causa degree. At the bottom right is the silver commemorative medal for the "honors paid to Prof. Alessandro Volta," pictured on the book's front page.

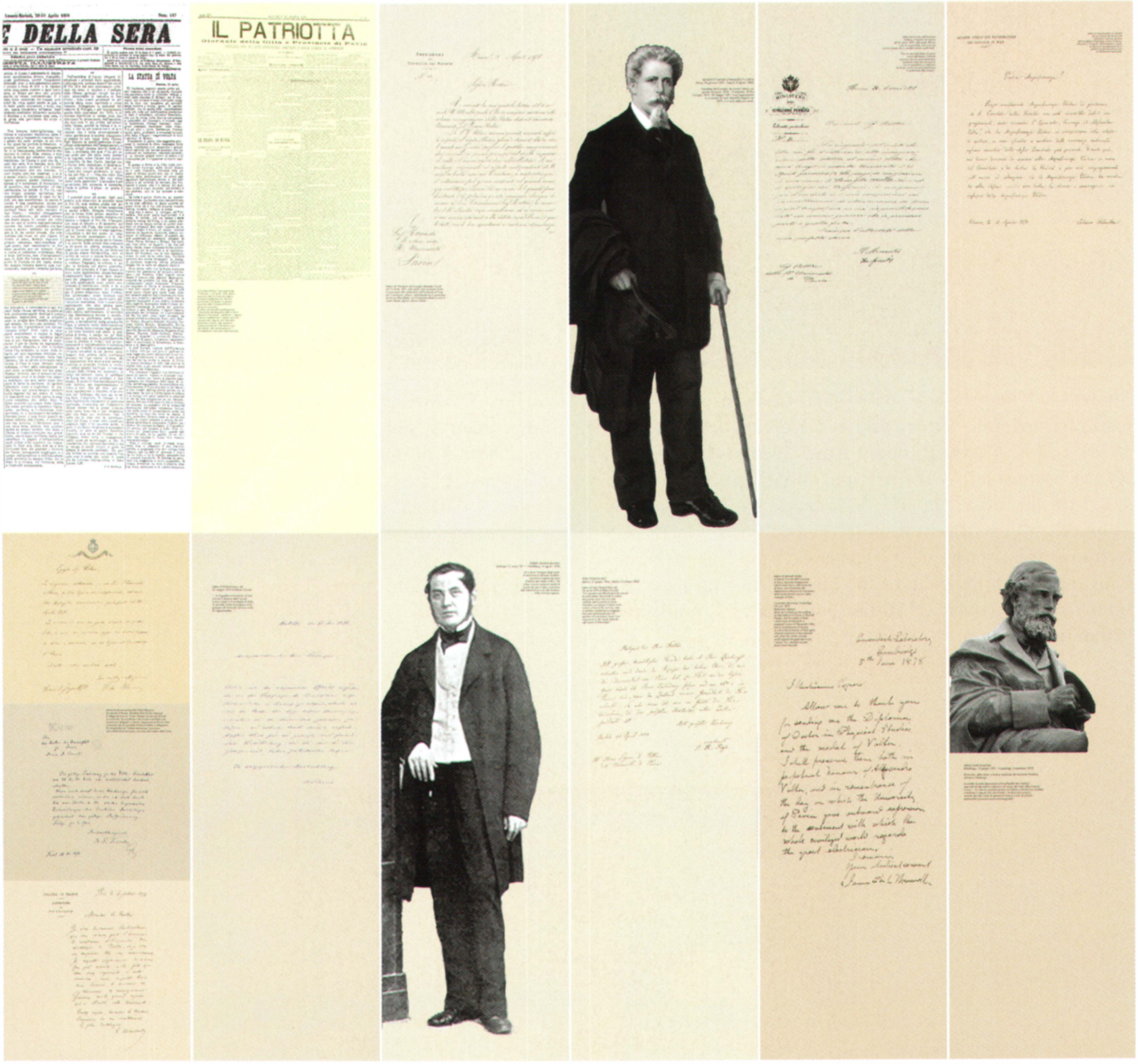

Figure 10. The right-hand side of the exhibition hall (from the bottom), showing the front pages of national and local newspapers dedicated to a careful and vivid account of the celebrations. After that, blow-ups of letters from politicians of the time, along with their human-size portraits (in evidence, Prime Minister Benedetto Cairoli, and Robert Wilhelm Bunsen, awarded an honorary degree).

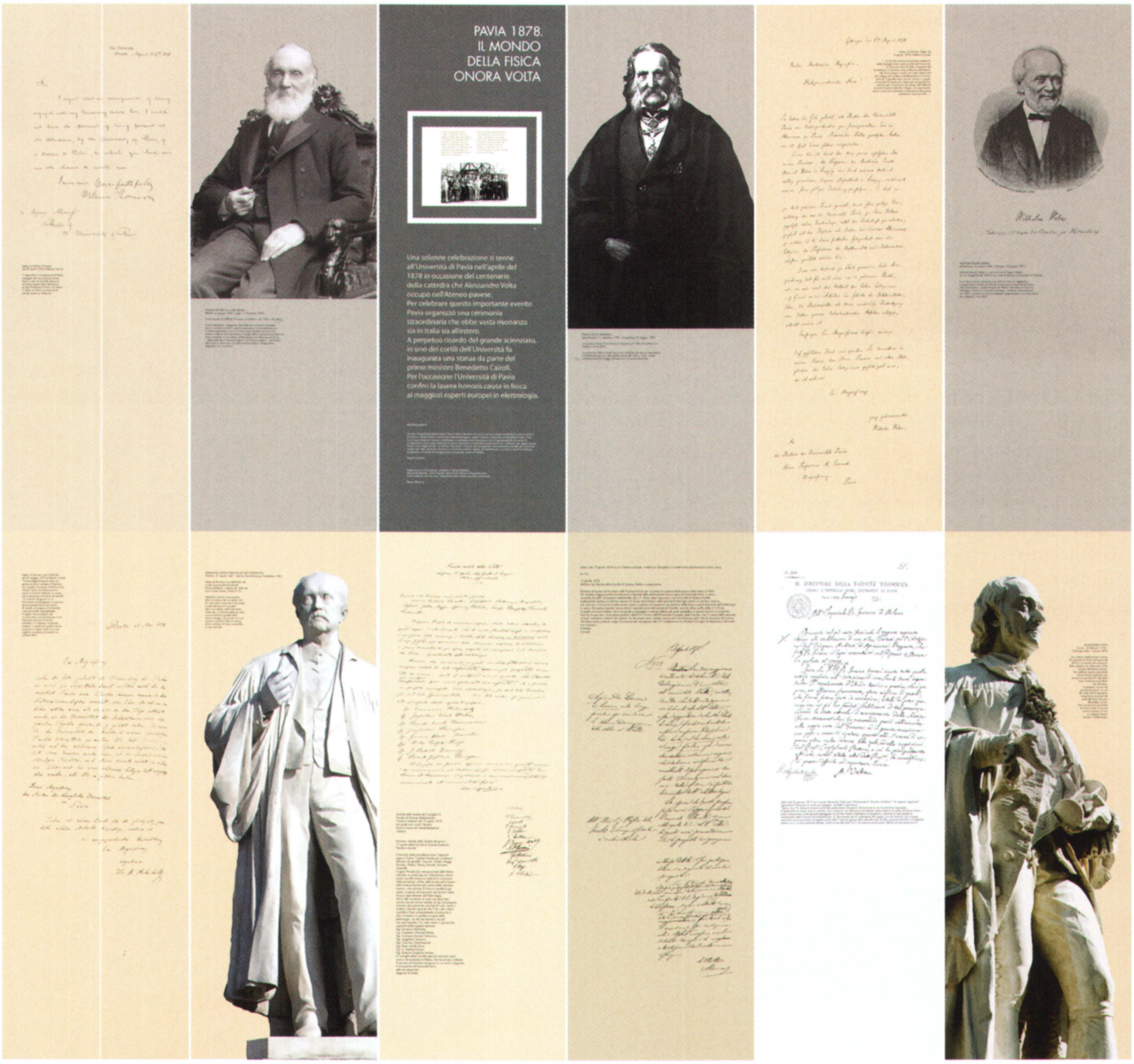
PAVIA 1878.
IL MONDO
DELLA FISICA
ONORA VOLTA
Una solenne celebrazione si tenne all'Università di Pavia nell'aprile del 1878 in occasione del centenario della cattedra che Alessandro Volta occupò nell'Ateneo pavese.
Per celebrare questo importante evento Pavia organizzò una cerimonia straordinaria che ebbe vasta risonanza sia in Italia sia all'estero.
A perpetuo ricordo del grande scienziato, in uno dei cortili dell'Università fu inaugurata una statua da parte del primo ministro Benedetto Cairoli.
Per l'occasione l'Università di Pavia conferì la laurea honoris causa in fisica ai maggiori esperti europei in elettrologia.

Figure 11. From the left: two newspapers' front pages; an enlargement of one of the letters and a portrait of Benedetto Cairoli; a letter of Francesco De Sanctis (Minister for State Education); a letter from Wien University; and in a single slot, letters of Pietro Blaserna (Rome University), Éleutère Élie Nicolas Mascart (Collège de France), and Gustav Karsten (Kiel University). From here, portraits of the scientists awarded the honorary degree, with enlargements of one of their letters: a letter and portrait of Bunsen; a letter from Riess; a letter and portrait of James Clerk Maxwell; a letter and portrait of William Thomson, Lord Kelvin; a slot with a slide-show presentation on the historical context of the second half of the nineteenth century; a portrait of Franz Ernst Neumann; a letter and portrait of Wilhelm Eduard Weber; a letter and portrait of Hermann Ludwig Ferdinand von Helmholtz; and finally, the official minutes of the April 15, 1878, Faculty Board Meeting of the Faculty of Mathematical, Physical, and Natural Sciences, approving the names of the scientists to be awarded; a letter from Rector Alfonso Corradi dated April 13, 1878, defining the regulations for the distinctiveness of honoris causa degrees; a letter and portrait of Alessandro Volta.

Figure 12. The right side of the entrance of the exhibition hall with a picture of the statue of Alessandro Volta by Antonio Tantardini, in the courtyard of the University of Pavia, inaugurated during the April 28, 1878, celebrations. Following this is an enlargement of Volta's letter, dated January 23, 1819, to the Imperial Royal Government of Milan, with a report on the establishment of schools for engineers. At the far left, Hermann von Helmholtz and one of his letters are recognizable.

Introducing the Authors

Virginio Cantoni is a full Professor in Computer Engineering at the University of Pavia, and former Dean of the Faculty of Engineering. In the period 2008-2011, he was seconded to the Centro Linceo "Beniamino Segre" of the Accademia dei Lincei. He is the founder and first Director of the University of Pavia's European School of Advanced Studies in Media Science and Technology, and former Director of the Interdepartmental Centre for Cognitive Science. His research activity is concerned with pattern recognition and parallel architectures for image processing and computer vision. He is author or co-author of more than 200 journal and conference papers and book chapters, as well as editor or co-editor of 25 books, and coauthor of three books. He has organized many international conferences, seminars, and workshops, including a NATO Advanced Research Workshop on pyramidal systems for computer vision. An Expert and Project Reviewer for the EU Commission, he became a Fellow of the IAPR in 1994, and a Fellow of the IEEE in 1997.

Mauro Mosconi is a human-computer interaction researcher and a usability professional. He received the PhD in Electronic Engineering and Computer Science from the University of Pavia, and he joined the Department of Computer Engineering and Systems Science of the same university in 1992. In 1994, he created one of the very first Web agencies in Italy.

Updated URL

The URL for Part 2b of Bill Croswell's personal history on the IEEE Global History Network has been updated. The correct URL is now the following:

http://www.ieeeghn.org/wiki/index.php/First-Hand:My_Personal_History_With_APS,_Part_2b